ABSTRACT

A system having a microfluidic channel structure in which fluids are able to interact to produce at least one product, and an automated closed-loop control mechanism to autonomously control a condition in, or of, the channel structure, the control mechanism having a sensor adapted to produce a sensor signal representative of a predetermined property of the at least one product which is dependent on the condition in, or of, the channel structure, means adapted to vary the condition in, or of, the channel structure, and a computer which is adapted to receive the sensor signal and to cause the means to vary the condition in, or of, the channel structure in dependence of the sensor signal is disclosed.